WHAT IS CLAIMED IS:

1. A method of forming a microlens, comprising providing a doped glass having at least one metallic component other than copper, and locally irradiating said doped glass by a continuous wave laser beam, so as to melt a portion of said doped glass, thereby to form the microlens.

2. The method of claim 1, wherein said at least one metallic component is selected from the group consisting of silver, gold, nickel, ferrum, cerium, and platinum.

3. The method of claim 1, wherein said at least one metallic component forms at least one diffusion layer of metallic nanoclusters.

4. The method of claim 1, wherein said at least one metallic component forms a bulk in said doped glass.

5. The method of claim 3, wherein a diffusion depth of said at least one diffusion layer is from about 3 micrometers to about 100 micrometers.

6. The method of claim 1, wherein said doped glass is characterized by a predetermined optical absorption spectrum.

7. The method of claim 1, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so as to provide the microlens with a predetermined radius.

8. The method of claim 1, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so as to provide the microlens with a predetermined height.

9. The method of claim 1, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of

said irradiation is selected so as to provide the microlens with a predetermined prismatic properties.

10. The method of claim 7, wherein said radius of the microlens is from about 0.7 micrometer to about 100 micrometers.

11. The method of claim 8, wherein said height of the microlens is from about 0.07 micrometer to about 10 micrometers.

12. The method of claim 1, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so that the microlens is transparent to light having a wavelength from about 350 nanometers to about 2 micrometers.

13. The method of claim 1, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so that the microlens is transparent to light having a wavelength from about 400 nanometers to about 2 micrometers.

14. The method of claim 1, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so that the microlens is transparent to visible light.

15. The method of claim 1, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so that the microlens is transparent to infrared light.

16. The method of claim 1, wherein said locally irradiating said doped glass is by a laser device selected from the group consisting of a solid state laser device, a liquid laser deviceand a gaseous laser device.

17. The method of claim 1, wherein said locally irradiating is effected by a procedure selected from the group consisting of irradiating by an Argon-based laser

device, irradiating by a blue diode laser device, irradiating by a second harmonic of a Nd:YAG laser device, irradiating by a third harmonic of a Nd:YAG laser device and irradiating by an excimer laser device.

18. The method of claim 6, wherein said predetermined optical absorption spectrum is such that said doped glass absorbs laser radiation having sufficiently small wavelength.

19. The method of claim 6, wherein said predetermined optical absorption spectrum is characterized by a peak in a green range of wavelengths.

20. The method of claim 6, wherein said predetermined optical absorption spectrum is characterized by a peak in a blue range of wavelengths.

21. The method of claim 6, wherein said predetermined optical absorption spectrum is characterized by a peak in an ultraviolet range of wavelengths.

22. The method of claim 6, wherein said predetermined optical absorption spectrum is characterized by a peak in about 410 nanometers.

23. The method of claim 1, wherein said laser beam is selected from the group consisting of a blue laser beam and an ultraviolet laser beam.

24. The method of claim 23, wherein said laser beam is characterized by a wavelength of 350 to 540 nanometers.

25. The method of claim 24, wherein said laser beam has an average power from about 10 to about 100 milliwatts.

26. The method of claim 1, further comprising focusing said laser beam.

27. The method of claim 26, wherein said focusing is by an optical element selected from the group consisting of a microscope objective lens, a GRIN lens and a diffraction lens.

28. The method of claim 26, wherein said focusing is performed so as to control at least one of a shape and size, a transparency and prismatic properties of the microlens.

29. The method of claim 1, wherein said laser beam is characterized by a central-symmetrical radial intensity distribution.

30. The method of claim 29, wherein said central-symmetrical radial intensity distribution comprises a Gaussian.

31. The method of claim 1, wherein an effective radius of said laser beam, prior to impinging on said doped glass, is in a micrometer scale.

32. The method of claim 1, wherein a duration of said irradiation is from about 0.1 millisecond to about 10 seconds.

33. A method of forming a microlens array, comprising:

(a) providing a doped glass having at least one metallic component other than copper;

(b) selecting a plurality of locations on said doped glass; and

(c) at each location of said plurality of locations, irradiating said doped glass by a continuous wave laser beam, so as to melt a portion of said doped glass, thereby to form a microlens at said location;

thereby forming a microlens array.

34. The method of claim 33, wherein said at least one metallic component is selected from the group consisting of silver, gold, nickel, ferrum, cerium, and platinum.

35. The method of claim 33, wherein said at least one metallic component forms at least one diffusion layer of metallic nanoclusters.

36. The method of claim 33, wherein said at least one metallic component forms a bulk in said doped glass.

37. The method of claim 35, wherein a diffusion depth of said at least one diffusion layer is from about 3 micrometers to about 100 micrometers.

38. The method of claim 33, wherein said said doped glass is characterized by a predetermined optical absorption spectrum.

39. The method of claim 33, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so as to provide said microlens with a predetermined radius.

40. The method of claim 33, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so as to provide said microlens with a predetermined height.

41. The method of claim 33, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so as to provide said microlens with a predetermined focal length.

42. The method of claim 33, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so as to provide said microlens with a predetermined prismatic properties.

43. The method of claim 39, wherein said radius of said microlens is from about 0.7 micrometer to about 100 micrometers.

44. The method of claim 40, wherein said height of said microlens is from about 0.07 micrometer to about 10 micrometers.

45. The method of claim 33, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so that said microlens is transparent to visible light.

46. The method of claim 33, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so that said microlens is transparent to infrared light.

47. The method of claim 33, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so that said microlens is transparent to light having a wavelength from about 350 nanometers to about 2 micrometers.

48. The method of claim 33, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so that said microlens is transparent to light having a wavelength from about 400 nanometers to about 2 micrometers.

49. The method of claim 33, wherein said locally irradiating is effected by a procedure selected from the group consisting of irradiating by an Argon-based laser device, irradiating by a blue diode laser device, irradiating by a second harmonic of a Nd:YAG laser device, irradiating by a third harmonic of a Nd:YAG laser device and irradiating by an excimer laser device.

50. The method of claim 33, wherein said locally irradiating said doped glass is by a laser device selected from the group consisting of a solid state laser device, a liquid laser deviceand a gaseous laser device.

51. The method of claim 38, wherein said predetermined optical absorption spectrum is such that said doped glass absorbs laser radiation having sufficiently small wavelength.

52. The method of claim 38, wherein said predetermined optical absorption spectrum is characterized by a peak in a green range of wavelengths.

53. The method of claim 38, wherein said predetermined optical absorption spectrum is characterized by a peak in a blue range of wavelengths.

54. The method of claim 38, wherein said predetermined optical absorption spectrum is characterized by a peak in an ultraviolet range of wavelengths.

55. The method of claim 38, wherein said predetermined optical absorption spectrum is characterized by a peak in about 410 nanometers.

56. The method of claim 33, wherein said laser beam is selected from the group consisting of a blue laser beam and an ultraviolet laser beam.

57. The method of claim 56, wherein said laser beam is characterized by a wavelength of 350 to 540 nanometers.

58. The method of claim 57, wherein said laser beam has an average power from about 10 to about 100 milliwatts.

59. The method of claim 33, further comprising focusing said laser beam.

60. The method of claim 59, wherein said focusing is by an optical element selected from the group consisting of a microscope objective lens, a GRIN lens and a diffraction lens.

61. The method of claim 59, wherein said focusing is performed so as to control at least one of a shape and size, a transparency and prismatic properties of the microlens.

62. The method of claim 33, wherein said laser beam is characterized by a central-symmetrical radial intensity distribution.

63. The method of claim 62, wherein said central-symmetrical radial intensity distribution comprises a Gaussian.

64. The method of claim 33, wherein an effective radius of said laser beam, prior to impinging on said doped glass, is in a micrometer scale.

65. The method of claim 33, wherein a duration of said irradiation is from about 0.1 millisecond to about 10 seconds.

66. A microlens formed in a doped glass having at least one metallic component other than copper, the microlens being formed in said doped glass by local radiation of a continuous wave laser beam, selected so as to melt a portion of said doped glass, thereby to form the microlens.

67. The microlens of claim 66, wherein said at least one metallic component is selected from the group consisting of silver, gold, nickel, ferrum, cerium, and platinum.

68. The microlens of claim 66, wherein said at least one metallic component forms a plurality of crystallites surrounding the microlens.

69. The microlens of claim 68, wherein a thickness of said plurality of crystallites is from about 10 nanometers to about 200 nanometers.

70. The microlens of claim 66, wherein a radius of the microlens is from about 0.7 micrometer to about 100 micrometers.

71. The microlens of claim 66, wherein a height of the microlens is from about 0.07 micrometer to about 10 micrometers.

72. The microlens of claim 66, being transparent to light having a wavelength from about 350 nanometers to about 2 micrometers.

73. The microlens of claim 66, being transparent to light having a wavelength from about 400 nanometers to about 2 micrometers.

74. A microlens formed in a doped glass having at least one metallic component other than copper, the microlens is transparent to light having a wavelength from about 350 nanometers to about 2 micrometers.

75. The microlens of claim 74, wherein said at least one metallic component is selected from the group consisting of silver, gold, nickel, ferrum, cerium, and platinum.

76. The microlens of claim 74, wherein said at least one metallic component forms a plurality of crystallites surrounding the microlens.

77. The microlens of claim 76, wherein a thickness of said plurality of crystallites is from about 10 nanometers to about 200 nanometers.

78. The microlens of claim 74, wherein a radius of the microlens is from about 0.7 micrometer to about 100 micrometers.

79. The microlens of claim 74, wherein a height of the microlens is from about 0.07 micrometer to about 10 micrometers.

80. The microlens of claim 74, being transparent to light having a wavelength from about 400 nanometers to about 2 micrometers.

81. A microlens array, comprising a plurality of microlenses formed in a doped glass having at least one metallic component other than copper, wherein each of said plurality of microlenses of the microlens array is transparent to light having a wavelength from about 350 nanometers to about 2 micrometers.

82. The microlens array of claim 81, wherein said at least one metallic component is selected from the group consisting of silver, gold, nickel, ferrum, cerium, and platinum.

83. The microlens array of claim 81, wherein said at least one metallic component forms a plurality of crystallites surrounding at least a portion of said plurality of microlenses.

84. The microlens array of claim 83, wherein a thickness of said plurality of crystallites is from about 10 nanometers to about 200 nanometers.

85. The microlens array of claim 81, wherein a radius of at least a portion of said plurality of microlenses is from about 0.7 micrometer to about 100 micrometers.

86. The microlens array of claim 81, wherein a height of at least a portion of said plurality of microlenses is from about 0.07 micrometer to about 10 micrometers.

87. The microlens array of claim 81, wherein each of said plurality of microlenses of the microlens array is transparent to light having a wavelength from about 400 nanometers to about 2 micrometers.

88. An optical device having at least one microlens array, the microlens array comprising a plurality of microlenses formed in a doped glass having at least one metallic component other than copper, wherein each of said plurality of microlenses of the microlens array is transparent to light having a wavelength from about 350 nanometers to about 2 micrometers.

89. The optical device of claim 88, selected from the group consisting of an imaging device, a microscope, a confocal microscope, a telescope, a magnifying device, an optical interconnecting unit, a telecommunications device, a micro-optical device, an integrated optical circuit, a display device, a multi LCD projection device, a single LCD projection device, a LED based display device, an integral photography device, a retroreflector array, a surface characterization device, and a wavefront sensing device.

90. The optical device of claim 88, wherein said at least one metallic component is selected from the group consisting of silver, gold, nickel, ferrum, cerium, and platinum.

91. The optical device of claim 88, wherein said at least one metallic component forms a plurality of crystallites surrounding at least a portion of said plurality of microlenses.

92. The optical device of claim 91, wherein a thickness of said plurality of crystallites is from about 10 nanometers to about 200 nanometers.

93. The optical device of claim 88, wherein a radius of at least a portion of said plurality of microlenses is from about 0.7 micrometer to about 100 micrometers.

94. The optical device of claim 88, wherein a height of at least a portion of said plurality of microlenses is from about 0.07 micrometer to about 10 micrometers.

95. The optical device of claim 88, wherein each of said plurality of microlenses of the microlens array is transparent to light having a wavelength from about 350 nanometers to about 2 micrometers.

96. A method of forming a microlens, comprising:

(a) doping a glass with at least one metallic component other than copper, thereby providing a doped glass; and

(b) locally irradiating said doped glass by a continuous wave laser beam, so as to melt a portion of said doped glass, thereby to form the microlens.

97. The method of claim 96, wherein said doping said glass with said at least one metallic component comprises:

(i) exchanging ions of said glass with ions of said at least one metallic component; and

(ii) generating conditions for growth of metallic nanoclusters of said at least one metallic component, thereby providing at least one diffusion layer of metallic nanoclusters.

98. The method of claim 96, wherein said doping said glass with said at least one metallic component comprises:

(i) providing a molten environment and mixing said at least one metallic component therein, so as to provide a mixed molten environment; and

(ii) cooling said mixed molten environment so as to form a glass having a bulk of said at least one metallic component doped therein.

99. The method of claim 98, wherein said glass melt comprises at least one component selected from the group consisting of powdered silica, sodium carbonate, lithium carbonate, boron oxide, zirconium oxide, cerium oxide, aluminum oxide and arsenic oxide.

100. The method of claim 96, wherein a composition of said glass is selected so as to allow ion exchange between said glass and said at least one metallic component.

101. The method of claim 96, wherein said at least one metallic component is selected from the group consisting of silver, gold, nickel, ferrum, cerium, and platinum.

102. The method of claim 97, wherein said ions of said glass are alkali ions.

103. The method of claim 97, wherein said ions of said glass are selected from the group consisting of sodium ions, lithium ions, rubidium ions, cesium ions and potassium ions.

104. The method of claim 97, wherein said exchanging ions of said glass with ions of said at least one metallic component is by positioning said glass in a molted environment comprising a mix alkaline and the at least one metallic component.

105. The method of claim 104, wherein said molted environment comprising at least one combination selected from the group consisting of $AgNO_3$, $AgNO_3$ and $NaNO_3$, $AgNO_3$ and KNO_3, $AgNO_3$ and ($NaNO_3$+KNO_3).

106. The method of claim 97, further comprising exchanging ions of said glass with ions present in a molted salt containing alkaline ions.

107. The method of claim 104, wherein said molted environment comprises about 5 parts of said $AgNO_3$ and about 95 parts of said $NaNO_3$.

108. The method of claim 96, wherein said doping said glass is done so as that a concentration of said at least one metallic component within a predetermined region of said doped glass is at least 5 percent by weight.

109. The method of claim 96, wherein said doping said glass is done so as that a concentration of said at least one metallic component within a predetermined region of said doped glass is at least 10 percent by weight.

110. The method of claim 97, wherein said step of exchanging ions is performed at a temperature of at least 160 degrees centigrade.

111. The method of claim 97, wherein said generating said conditions for said growth of said metallic nanoclusters is by annealing said doped glass in Hydrogen atmosphere.

112. The method of claim 111, wherein a temperature of said Hydrogen atmosphere is from about 150 degrees centigrade to about 250 degrees centigrade.

113. The method of claim 97, wherein a diffusion depth of said at least one diffusion layer is from about 3 micrometers to about 100 micrometers.

114. The method of claim 96, wherein said doping said glass is characterized by a dopant type, a dopant concentration level, a doping time and a doping temperature, and further wherein at least one of said dopant type, said dopant concentration level, said doping time and said doping temperature is selected so as to provide said doped glass with a predetermined optical absorption spectrum.

115. The method of claim 114, wherein said predetermined optical absorption spectrum is such that said doped glass absorbs laser radiation having sufficiently small wavelength.

116. The method of claim 114, wherein said predetermined optical absorption spectrum is characterized by a peak in a green range of wavelengths.

117. The method of claim 114, wherein said predetermined optical absorption spectrum is characterized by a peak in a blue range of wavelengths.

118. The method of claim 114, wherein said predetermined optical absorption spectrum is characterized by a peak in an ultraviolet range of wavelengths.

119. The method of claim 114, wherein said predetermined optical absorption spectrum is characterized by a peak in about 410 nanometers.

120. The method of claim 96, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so as to provide the microlens with a predetermined radius.

121. The method of claim 96, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so as to provide the microlens with a predetermined height.

122. The method of claim 96, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so as to provide the microlens with a predetermined focal length.

123. The method of claim 96, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so as to provide the microlens with a predetermined prismatic properties.

124. The method of claim 120, wherein said radius of the microlens is from about 0.7 micrometer to about 100 micrometers.

125. The method of claim 121, wherein said height of the microlens is from about 0.07 micrometer to about 10 micrometers.

126. The method of claim 96, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so that the microlens is transparent to visible light.

127. The method of claim 96, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so that the microlens is transparent to infrared light.

128. The method of claim 96, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so that the microlens is transparent to light having a wavelength from about 350 nanometers to about 2 micrometers.

129. The method of claim 96, wherein at least one of an exposure duration, a power, an impinging angle, a polarization, a divergence and an intensity distribution of said irradiation is selected so that the microlens is transparent to light having a wavelength from about 400 nanometers to about 2 micrometers.

130. The method of claim 96, wherein said locally irradiating is effected by a procedure selected from the group consisting of irradiating by an Argon-based laser device, irradiating by a blue diode laser device, irradiating by a second harmonic of a Nd:YAG laser device, irradiating by a third harmonic of a Nd:YAG laser device and irradiating by an excimer laser device.

131. The method of claim 96, wherein said locally irradiating said doped glass is by a laser device selected from the group consisting of a solid state laser device, a liquid laser deviceand a gaseous laser device.

132. The method of claim 96, wherein said laser beam is selected from the group consisting of a blue laser beam and an ultraviolet laser beam.

133. The method of claim 132, wherein said laser beam is characterized by a wavelength of 350 to 540 nanometers.

134. The method of claim 133, wherein said laser beam has an average power from about 10 to about 100 milliwatts.

135. The method of claim 96, further comprising focusing said laser beam.

136. The method of claim 135, wherein said focusing is by an optical element selected from the group consisting of a microscope objective lens, a GRIN lens and a diffraction lens.

137. The method of claim 135, wherein said focusing is performed so as to control at least one of a shape and size, a transparency and prismatic properties of the microlens.

138. The method of claim 96, wherein said laser beam is characterized by a central-symmetrical radial intensity distribution.

139. The method of claim 138, wherein said central-symmetrical radial intensity distribution comprises a Gaussian.

140. The method of claim 96, wherein an effective radius of said laser beam, prior to impinging on said doped glass, is in a micrometer scale.

141. The method of claim 96, wherein a duration of said irradiation is from about 0.1 millisecond to about 10 seconds.

142. A method of forming at least one microlens on a doped glass having at least one metallic component other than copper, the method comprising:

(a) selecting a shape and size for the microlens;

(b) using physical characteristics of the doped glass for calculating at least one laser beam parameter, said at least one laser beam parameter being suitable for providing said shape and size of the at least one microlens; and

(c) locally irradiating the doped glass by a continuous wave laser beam having said at least one laser beam parameter, so as to melt a portion of the doped glass, thereby to form the at least one microlens.

143. The method of claim 142, further comprising repeating said step (c) a plurality of times, each time in a different location on the doped glass, to form a microlens array.

144. The method of claim 142, wherein said calculating said at least one laser beam parameter comprises calculating a temperature distribution of the doped glass and using said temperature distribution for calculating said at least one laser beam parameter.

145. The method of claim 142, wherein said shape and size is defined by at least one of a radius, a height and a profile.

146. The method of claim 142, wherein said at least one laser beam parameter is selected from the group consisting of a wavelength, a polarization, a divergence, a power, an exposure duration, an impinging angle and an intensity distribution.

147. The method of claim 142, wherein said physical characteristics are selected from the group consisting of thermal diffusivity, thermal conductivity, heat capacity, glass viscosity temperature dependence and absorption coefficient.

148. The method of claim 144, wherein said calculating said temperature distribution comprises solving a heat diffusion equation.

149. The method of claim 148, wherein said heat diffusion equation is a steady-state heat diffusion equation.

150. The method of claim 148, wherein said heat diffusion equation is a non-linear heat diffusion equation, being characterized by a non-linear term.

151. The method of claim 150, wherein said non-linear term comprises a temperature dependent thermal diffusivity.

152. The method of claim 150, wherein said temperature dependent thermal diffusivity has an exponential form.

153. The method of claim 151, further comprising performing a linearization procedure on said non-linear heat diffusion equation, thereby constructing a linear differential equation.

154. The method of claim 153, wherein said linearization procedure comprises introducing an integrated function and substitution said integrated function in said non-linear heat diffusion equation.

155. The method of claim 154, wherein said integrated function comprises an integral of said temperature dependent thermal diffusivity.

156. The method of claim 144, wherein said calculating said at least one laser beam parameter comprises generating a graphical representation of said temperature distribution, and detecting portions of said graphical representation corresponding to a formation of the at least one microlens.

157. The method of claim 156, wherein said graphical representation comprises a plurality of isotherms.

158. The method of claim 157, wherein said portions of said graphical representation comprises at least one isotherm of said plurality of isotherms.

159. The method of claim 142, wherein the at least one metallic component is selected from the group consisting of silver, gold, nickel, ferrum, cerium, and platinum.

160. The method of claim 142, wherein the at least one metallic component forms at least one diffusion layer of metallic nanoclusters.

161. The method of claim 142, wherein said at least one metallic component forms a bulk in said doped glass.

162. The method of claim 160, wherein a diffusion depth of said at least one diffusion layer is from about 3 micrometers to about 100 micrometers.

163. The method of claim 145, wherein said radius of the microlens is from about 0.7 micrometer to about 100 micrometers.

164. The method of claim 145, wherein said height of the microlens is from about 0.07 micrometer to about 10 micrometers.

165. The method of claim 142, wherein said laser beam is selected from the group consisting of a blue laser beam and an ultraviolet laser beam.

166. The method of claim 165, wherein said laser beam is characterized by a wavelength of 350 to 540 nanometers.

167. The method of claim 166, wherein said laser beam has an average power from about 10 to about 100 milliwatts.

168. The method of claim 142, further comprising focusing said laser beam.

169. The method of claim 168, wherein said focusing is by an optical element selected from the group consisting of a microscope objective lens, a GRIN lens and a diffraction lens.

170. The method of claim 168, wherein said focusing is performed so as to control at least one of a shape and size, a transparency and prismatic properties of the microlens.

171. The method of claim 142, wherein said laser beam is characterized by a central-symmetrical radial intensity distribution.

172. The method of claim 171, wherein said central-symmetrical radial intensity distribution comprises a Gaussian.

173. The method of claim 142, wherein an effective radius of said laser beam, prior to impinging on said doped glass, is in a micrometer scale.

174. A method of forming at least one microlens having a predetermined shape and size, comprising:

(a) doping a glass with at least one metallic component other than copper, thereby providing a doped glass;

(b) using physical characteristics of said doped glass for calculating at least one laser beam parameter, said at least one laser beam parameter being suitable for providing the predetermined shape and size of the at least one microlens; and

(c) locally irradiating said doped glass by a continuous wave laser beam having said at least one laser beam parameter, so as to melt a portion of the doped glass, thereby to form the at least one microlens.

175. The method of claim 174, further comprising repeating said step (c) a plurality of times, each time in a different location on said doped glass, to form a microlens array.

176. The method of claim 174, wherein said calculating said at least one laser beam parameter comprises calculating a temperature distribution of the doped glass and using said temperature distribution for calculating said at least one laser beam parameter.

177. The method of claim 174, wherein the predetermined shape and size comprises at least one of a predetermined radius, a predetermined height and a predetermined profile.

178. The method of claim 174, wherein said at least one laser beam parameter is selected from the group consisting of a wavelength, a polarization, a divergence, a power, an exposure duration, an impinging angle and an intensity distribution.

179. The method of claim 174, wherein said physical characteristics are selected from the group consisting of thermal diffusivity, thermal conductivity, heat capacity, glass viscosity temperature dependence and absorption coefficient.

180. The method of claim 176, wherein said calculating said temperature distribution comprises solving a heat diffusion equation.

181. The method of claim 180, wherein said heat diffusion equation is a steady-state heat diffusion equation.

182. The method of claim 180, wherein said heat diffusion equation is a non-linear heat diffusion equation, being characterized by a non-linear term.

183. The method of claim 182, wherein said non-linear term comprises a temperature dependent thermal diffusivity.

184. The method of claim 182, wherein said temperature dependent thermal diffusivity has an exponential form.

185. The method of claim 183, further comprising performing a linearization procedure on said non-linear heat diffusion equation, thereby constructing a linear differential equation.

186. The method of claim 185, wherein said linearization procedure comprises introducing an integrated function and substitution said integrated function in said non-linear heat diffusion equation.

187. The method of claim 186, wherein said integrated function comprises an integral of said temperature dependent thermal diffusivity.

188. The method of claim 176, wherein said calculating said at least one laser beam parameter comprises generating a graphical representation of said temperature distribution, and detecting portions of said graphical representation corresponding to a formation of the at least one microlens.

189. The method of claim 188, wherein said graphical representation comprises a plurality of isotherms.

190. The method of claim 189, wherein said portions of said graphical representation comprises at least one isotherm of said plurality of isotherms.

191. The method of claim 174, wherein said doping said glass with said at least one metallic component comprises:

(i) exchanging ions of said glass with ions of said at least one metallic component; and

(ii) generating conditions for growth of metallic nanoclusters of said at least one metallic component, thereby providing at least one diffusion layer of metallic nanoclusters.

192. The method of claim 174, wherein said doping said glass with said at least one metallic component comprises:

(i) providing a molten environment and mixing said at least one metallic component therein, so as to provide a mixed molten environment; and

(ii) cooling said mixed molten environment so as to form a glass having a bulk of at least one metallic component doped therein.

193. The method of claim 192, wherein said glass melt comprises at least one component selected from the group consisting of powdered silica, sodium carbonate, lithium carbonate, boron oxide, zirconium oxide, cerium oxide, aluminum oxide and arsenic oxide.

194. The method of claim 174, wherein a composition of said glass is selected so as to allow ion exchange between said glass and said at least one metallic component.

195. The method of claim 174, wherein said at least one metallic component is selected from the group consisting of silver, gold, nickel, ferrum, cerium, and platinum.

196. The method of claim 191, wherein said ions of said glass are alkali ions.

197. The method of claim 191, wherein said ions of said glass are selected from the group consisting of sodium ions, lithium ions, rubidium ions, cesium ions and potassium ions.

198. The method of claim 191, wherein said exchanging ions of said glass with ions of said at least one metallic component is by positioning said glass in a molted environment comprising a mix alkaline and the at least one metallic component.

199. The method of claim 198, wherein said molted environment comprising at least one combination selected from the group consisting of $AgNO_3$, $AgNO_3$ and $NaNO_3$, $AgNO_3$ and KNO_3, $AgNO_3$ and ($NaNO_3$+KNO_3).

200. The method of claim 191, further comprising exchanging ions of said glass with ions present in a molted salt containing alkaline ions.

201. The method of claim 198, wherein said molted environment comprises about 5 parts of said $AgNO_3$ and about 95 parts of said $NaNO_3$.

202. The method of claim 174, wherein said doping said glass is done so as that a concentration of said at least one metallic component within a predetermined region of said doped glass is at least 5 percent by weight.

203. The method of claim 174, wherein said doping said glass is done so as that a concentration of said at least one metallic component within a predetermined region of said doped glass is at least 10 percent by weight.

204. The method of claim 191, wherein said step of exchanging ions is performed at a temperature of at least 160 degrees centigrade.

205. The method of claim 191, wherein said generating said conditions for said growth of said metallic nanoclusters is by annealing said doped glass in Hydrogen atmosphere.

206. The method of claim 205, wherein a temperature of said Hydrogen atmosphere is from about 150 degrees centigrade to about 250 degrees centigrade.

207. The method of claim 191, wherein a diffusion depth of said at least one diffusion layer is from about 3 micrometers to about 100 micrometers.

208. The method of claim 174, wherein said doping said glass is characterized by a dopant type, a dopant concentration level, a doping time and a doping temperature, and further wherein at least one of said dopant type, said dopant concentration level, said doping time and said doping temperature is selected so as to provide said doped glass with a predetermined optical absorption spectrum.

209. The method of claim 208, wherein said predetermined optical absorption spectrum is such that said doped glass absorbs laser radiation having sufficiently small wavelength.

210. The method of claim 208, wherein said predetermined optical absorption spectrum is characterized by a peak in a green range of wavelengths.

211. The method of claim 208, wherein said predetermined optical absorption spectrum is characterized by a peak in a blue range of wavelengths.

212. The method of claim 208, wherein said predetermined optical absorption spectrum is characterized by a peak in an ultraviolet range of wavelengths.

213. The method of claim 208, wherein said predetermined optical absorption spectrum is characterized by a peak in about 410 nanometers.

214. The method of claim 177, wherein said predetermined radius is from about 0.7 micrometer to about 100 micrometers.

215. The method of claim 177, wherein said predetermined height is from about 0.07 micrometer to about 10 micrometers.

216. The method of claim 174, further comprising focusing said laser beam.

217. The method of claim 216, wherein said focusing is by an optical element selected from the group consisting of a microscope objective lens, a GRIN lens and a diffraction lens.

218. The method of claim 216, wherein said focusing is performed so as to control at least one of a shape and size, a transparency and prismatic properties of the microlens.

219. The method of claim 174, wherein said laser beam is characterized by a central-symmetrical radial intensity distribution.

220. The method of claim 219, wherein said central-symmetrical radial intensity distribution comprises a Gaussian.

221. The method of claim 174, wherein an effective radius of said laser beam, prior to impinging on said doped glass, is in a micrometer scale.